IMPACT: International Journal of Research in Applied, Natural and Social Sciences (IMPACT: IJRANSS) ISSN(E): 2321-8851; ISSN(P): 2347-4580

Vol. 3, Issue 1, Jan 2015, 49-56

© Impact Journals



ENGAGEMENT, SYSTEM THINKING, LEADING LEARNING AND SELF-AWARENESS: ARE PREDICTING VARIABLES OF SCHOOL EFFECTIVENESS

GARBABAGOBIRI, SOAIBASIMIRAN & RAMLIBASRI

Faculty of Educational Studies, Universiti Putra Malaysia, Selangor, Malaysia

ABSTRACT

In the area of educational leadership, engagement, system thinking, Leading learning and self-awareness were viewed among the leadership attributes that makes the principals to lead well rather than controlling the activities of their respective secondary schools. The research is a survey and quantitative in nature. It was conducted to find out whether Engagement, system thinking, Leading learning and self-awareness serves as predicting variables to school effectiveness. First of all, correlation analysis was employed, to determine the relationship between the Engagement, system thinking, Leading learning, self-awareness and school effectiveness and finally preceded to regression analysis to find out the extent to which engagement, system thinking, Leading learning and self-awareness predicts school effectiveness. Questionnaire was an instrument used in the collection of data, population of the study is 460, sample size is 272 which was obtained through the use of Cochran formula and simple random sampling techniques was used in the selection of sample. Findings indicated that, there is high positive significant relationship between the total of Engagement, system thinking, Leading learning, self-awareness and school effectiveness (r=0.73, r=0.01). Furthermore, regression analysis indicated that, Engagement significantly predicts school effectiveness. (r=0.73, r=0.01), System thinking significantly predicts school effectiveness (r=0.73, r=0.01), Self-awareness significantly predicts school effectiveness (r=0.73, r=0.01).

KEYWORDS: Engagement, System Thinking, Leading Learning, Self-Awareness and School Effectiveness

INTRODUCTION

Principals' leadership attributes are globally accepted as the key variable in accounting for differences in the success of secondary schools, with which schools foster the learning of their students. Indeed, the contribution of effective principals' leadership towards school effectiveness cannot be over emphasized; there are virtually no documented instances of troubled schools being turned around in the absence of intervention by talented principals. Therefore, it is very crucial for the principals to be conversant with those leadership attributes that enhance the fruitfulness of the principal ship towards the effectiveness of secondary schools. In a quantitative statistical analysis of related studies, examined the direct effects of principals' leadership on school effectiveness (Witziers, Bosker, & Krüger, 2003). Direct effects refer to the influence of principals' leadership attributes and practice to school effectiveness. Many educational scholars argue that, the relationship between the principals' leadership and school effectiveness is indirect; that is, there are intervening or antecedent variables that connect the association between the principals' leadership attributes and school effectiveness (Hallinger & Heck, 1998; Marks & Printy, 2003).

Educational researchers and scholars embrace diverse views regarding ways that principals' leadership improves school effectiveness. Numerous researchers found that principals' leadership attributes matter to students' outcomes and students' achievement (Brockmeier, Starr, Green, Pate, & Leech, 2013). In a global perspective, school principals are increasingly held accountable for educational quality in the belief that school success or failure is determined by the way a school principal displays his leadership skills and attributes (K. Leithwood, C. Day, P. Sammons, A. Harris, and D. Hopkins., 2006; Watson, 2003).

Nigerian Policy reforms aimed at deregulation and decentralization have gone hand-in-hand with efforts aimed at restructuring schools in such a way that principals are better able to manage the school's educational structure and by providing them with the necessary leadership attributes through extensive learning training programs. These efforts are guided by a belief among policy makers in school principals' ability to improve school effectiveness (Akinola, 2013; Arikewuyo, 2009). The growing accountability policies for education represent an international interest in answering the question of the degree to which the expectation that school principals predicts school effectiveness is a valid expectation (Bottery, 2006).

For the past decade, attention has been given to educational leadership and its impact on students' outcomes as well as the school effectiveness. The outcomes of research on school effectiveness and principals' leadership highlighted that, effective principal leadership resulted to the favorable school climate of which may result in the success of schools (Marks & Printy, 2003). This paper aimed at contributing to the existing scholarly articles on the question whether Engagement, system thinking, leading learning and self-awareness predicts the effectiveness of secondary schools. Researchers on principals' leadership mainly go to the principals' leadership style, while negating that leadership style is an aspect of leadership attributes, this resulted to the scanty researches in the area of principals leadership attributes. In most of the West African countries, including Nigeria teachers were given more priority in giving them a professional training negating that, the principals are thirsty of effective leadership attributes that enhance students' success. The study used its empirical evidence to provide a substantial information on how Engagement, System thinking, Leading learning and Self-awareness predicts school effectiveness. Therefore, paying attention to Engagement, System thinking, Leading learning and Self-awareness to find out its influence on school effectiveness, gives an even clearer insight into the potential impact of principals' leadership attributes to school effectiveness, This is because they capture the dimensions of educational leadership attributes that enables the principals to lead well rather than control (Senge, 2000).

REVIEW OF LITERATURES

A growing body of evidence accentuates a significant and positive relationship between effective principal leadership and school effectiveness. Recent research includes qualitative case studies of highly challenged, high-performing schools (Wildy & Louden, 2000). In a quantitative study examining indirect principals' leadership effects on student outcomes (Fullan & Watson, 2000; Hallinger, 1999). In fact, an extensive review of evidence related to the nature and size of these effects concluded that, among school-related factors, leadership is second only to classroom instruction in its contribution to student learning(K. Leithwood, Seashore Louis, Anderson, & Wahlstrom, 2004). Researchers and scholars observed that successful leadership relies upon a set of attributes which, when applied in combination, result in improving students' learning and school effectiveness. Among the leadership attributes highlighted by Leithwood, (2004) are as follows: To define and advance organizational purpose, vision, and direction; Develop people

and encourage their individual and collective sense of efficacy for the work; Redesign and improve organizational structures, systems, and contexts (Hallinger& Heck, 1999; Leithwood et al., 2004). Principals with effective leadership attribute work to develop a shared vision of the future, building consensus for relevant short-term goals. They offer intellectual support and stimulation, providing models of exemplary practice and modeling important values and beliefs. They create productive learning cultures, transforming systems and structures that impede improvement efforts (Les Bell, 2003). The knowledge that some school leaders improve learning conditions as they influence organizational aims, actors, and arrangements, and manage the daily routines of the school, emphasizes the importance of principals gaining comprehensive understanding of these core practices and related leadership attributes. School principals appear to have the greatest influence on student outcomes which is one the measure of school effectiveness(Moffitt, 2007).

Literatures highlighted on the bounteous leadership attributes needed by the school principals, to overcome with the ever-challenging situation of their respective schools. Cranston, (2002) asserts that, there are numerous numbers of leadership skills and attributes expected from the school principals in order to meet up with the academic performance of students, such includes the followings: Ability to manage and lead through uncertainty; Ability to be activate in complex burden and high job stresses; Knowing the various aspects of leadership strategies to meet up with people and school demands; Familiar with the numerous facets of managing the facilities, planning, organizing, staffing, directing, coordinating, budgeting and accountability; Knowledge of state, national, international educational development; Ability to manage and develop (educational and otherwise); Relational, communication skills, teamwork, consultation compromise, management of conflict, inducement; Ability to identify skills deficiency; Ability to act on priorities and effective time management.

The current study employed the four major educational leadership attributes, as proposed by Senge, (2000). These educational leadership attributes support the principals to lead well, rather than control and they include the followings: Engagement, System thinking, Leading learning, and Self-awareness. School effectiveness referred to as improving and realizing the school ability to achieve its objectives and promotes teachers' efficiency (Hallinger, 1998; Ololube, 2005). School effectiveness encompasses the overall achievement of the students in all the three domains of learning such includes psychomotor, effective and cognitive domain (Ekundayo, 2010; Akinola, 2013). In this study, school effectiveness is viewed as the extent to which school is able to attain its objectives, both academic achievement and moral behavior of the students in respect to the excellent teaching and effective principals' leadership (Hargreaves, 2001; Ekundayo, 2010).

METHODOLOGY

This research has been conducted to investigate the correlation between the engagement, system thinking, leading learning, self-awareness and school effectiveness. Data were collected to generate a new knowledge. Therefore, research methodology dealt with the methods and procedures to achieve the objectives of this study.

Research Design

Research design is a simple plan for a study, which is used in the collection of data and its analysis (Cooper, 2009). This study is a survey research and quantitative in nature. The study has been designed to examine whether engagement, system thinking, leading learning and self-awareness predicts school. In this context, the study

demands aregression analysis to measure the prediction of engagement, system thinking, leading learning and self-awareness to school effectiveness. In this study, the dependent variable is school effectiveness while engagement, system thinking, leading learning and self-awareness are independent variables.

Population, Sample and Sample Technique

The population of the study is a set of all the individuals of interest in a particular study (Frederick, 2011). The aim of sampling is to constitute a representative out of the actual number of the population. It can be viewed as a set of individuals selected from a population, usually intended to represent the population in the study(Frederick, 2011; Heppner, 2004). The sample size was determined by using the Cochran formula with additional of 30% of which rises the sample size to be 272. Many researchers who use survey research method experiences below 100% responds rate (Bartlett, 2005). Simple random sampling was used to determine the sample size.

Instrument

The main tool for data collection of this study was questionnaires in the form of observing rating form. Leader Attributes Inventory (LAI) was to used measure engagement, system thinking, leading learning and self-awareness. LAI was developed by Moss, Johanssen and Judith J. Lambrecht in 1991(Donald W. Knox, 2000). It measures each of the 37 leadership attributes. School Effectiveness Index (SE-Index) was used to measure the school effectiveness; it was developed by Wayne K. Hoy (Hoy, 1991).

Reliability Test

Reliability refers to the extent to which a measuring instrument such is able to produce consistency after test re-test is being administered (Fredrick, 2011). Therefore Data collected for both the pilot study and final study were subjected to reliability test in order to test its internal consistency. Researcher carried out a reliability test of the adapted questionnaire derived from Leader Attributes Inventory (LAI) and School Effectiveness Index (SEI). A pilot study was first conducted to determine its effectiveness and workability; it shows a crobach alpha value of (>.70). The final study indicated a cronbach alpha of >. 90 which is rated as excellent value (Mills, 2003).

DATA ANALYSIS

The study aimed at identifying the prediction of engagement, system thinking, leading learning, and self-awareness on school effectiveness through the teachers' perspectives. Data collected for the study was analyzed using SPSS software version 20. Correlation analysis was used first, to determine the relationship between the engagement, system thinking, leading learning and school effectiveness. Finally, regression was conducted to examine how Engagement, System thinking, Leading learning and Self-awareness predicts school effectiveness. Correlation analysis indicated that, there is high, positive significant relationship between the Engagement, System thinking, Leading learning, Self-awareness and school effectiveness (r = .703, p = 0.01).

Regression model consists of four predicting variables, namely; Engagement (χ_1), System Thinking (χ_2), Leading Learning (χ_3) and Self-Aware (χ_4). The prediction equation expresses below:

$$\hat{Y} = b_0 + b_1 \chi_1 + b_2 \chi_2 + b_3 \chi_3 + b_4 \chi_4 + e_i \dots (1).$$

Where: $\hat{Y} = SE; \chi_1 = Engagement; \chi_2 = System\ thinking; \chi_3 = Leading\ learning; \chi_4 = Self-awareness; \varepsilon = Random\ error.$

Model	Unstandardized Coefficients		Standardized Coefficients	Т	Sig.		
	В	Std. Error	Beta (β)				
(Constant)	3.280	1.602		2.047	.042		
Engagement	.159	.100	.122	1.589	.013		
System thinking	.401	.096	.381	4.171	.000		
Leading learning	.026	.071	.032	.359	.720		
Self-awareness	.200	.074	.232	2.722	.007		
Note: $R^2 = 0.509$,							
adjusted $R^2 = 0.501$							
a. Dependent Variable: School effectiveness							

Table 1: Multiple Linear Regressions on School Effectiveness

- H1: Engagement Significantly Contributed to School Effectiveness: The multiple linear regression analysis shows that, Engagement has highly significantly contributed to school effectiveness (β =.122, t = 1.589, p =.013). H1 is supported
- *H2: System Thinking Significantly Contributed to School Effectiveness:* It also indicates that. System Thinking has strongly positively contributed to school effectiveness ($\beta = .381$, t = 4.171, p = .000), therefore *H2b* is supported
- *H3: Leading Learning Has Significantly Contributed to School Effectiveness:* Leading Learning has insignificantly contributed to school effectiveness ($\beta = .032$, t = .359, p = .720), therefore it rejected H2c
- *H4:* Self-Awareness Has Significantly Contributed to School Effectiveness: Table 1 shows that, Self-Awareness has significantly contributed to school effectiveness ($\beta = .232$, t = 2.722, p = .007).

$$\hat{Y} = b_0 + b_1 \chi_1 + b_2 \chi_2 + b_3 \chi_3 + b_4 \chi_4 + e_i \dots$$

$$\hat{Y} = 3.280 + (0.159) \chi_1 + (0.401) \chi_2 + (0.026) \chi_3 + (0.200) \chi_4 + \text{Error}$$
(1)

DISCUSSIONS

Strong educational leadership has been found to be among the essential characteristic of school effectiveness, most scholars believed that; school effectiveness is interconnected with the leadership attributes of the principal being him the head of the school (Akinola, 2013). The study was set out to investigate the prediction of engagement, system thinking, leading learning, self-awareness to school effectiveness. Multiple regression analysis indicated that, Engagement, System thinking, leading learning and self-awareness have positively significantly predicted school effectiveness. Engagement has highly significantly contributed to school effectiveness ($\beta = .122$, t = 1.589, p = .013), System Thinking has strongly predicted school effectiveness ($\beta = .381$, t = 4.171, p = .000), Self-Awareness has significantly predicted school effectiveness ($\beta = .232$, t = 2.722, p = .007). And Leading Learning has insignificantly predicted school effectiveness ($\beta = .032$, t = .359, p = .720). However, leading learning in the future, may significantly predicts school effectiveness by the provision of measures towards acquisition of such skills that may improve leading learning as an attribute of principals' leadership. This finding collaborates Hallinger (2005) explain that, research findings from various countries and different school systems have revealed the powerful impact of principals' leadership in assuring school success. Hallinger added

that, 'the effect of principals' leadership is reasonable; it is statistically significant and supports the general belief among educators that principals contribute to school effectiveness.'

CONCLUSIONS

This research was meant to investigate whether engagement, system thinking, leading learning and self-awareness predicts school effectiveness. The study yielded several important results towards the teeth fillings an empirical and conceptual gap towards the predictors of school effectiveness. As been discussing in the result, all the three predictors significantly predict school effectiveness, but leading learning do not significantly predicts school effectiveness. There is a need to conduct further research in order to find out the reason why leading learning does not significantly contributed to school effectiveness. Similar research of the current one should be conducted using a large sample size, which would provide a more generalized database. Therefore, there are needs to develop programs with a substantial package of improving those leadership attributes that may improve leading learning so that it can significantly predicts school effectiveness.

REFERENCES

- 1. Akinola, Oluwatoyin B. (2013). Principals' Leadership Skills and School Effectiveness: The Case of South Western Nigeria. *World Journal of Education*, *3*(5), p26.
- 2. Arikewuyo, MO. (2009). Professional Training of Secondary School Principals in Nigeria: A Neglected Area in the Educational System. *Florida Journal of Educational Administration* 2(2).
- 3. Bartlett, Kenneth R. (2005). Survey research in organizations. *Research in organizations: Foundations and methods of inquiry*, 97-113.
- 4. Bottery, Mike. (2006). Educational leaders in a globalising world: a new set of priorities? *School Leadership and Management*, 26(1), 5-22.
- 5. Brockmeier, Lantry L, Starr, Gene, Green, Ronny, Pate, James L, & Leech, Donald W. (2013). Principal and School-Level Effects on Elementary School Student Achievement. *NCPEA*, 49.
- 6. Cooper, D. R., & Schindler, P. S. (2009). Business research methods
- 7. Donald W. Knox, Jr. (2000). *The Effect Of Leadership Training On Manufacturing Productivity Of Informal Leaders*. (Docto Of Philosphy), University Of North Texas.
- 8. Frederick, J. Gravetter and Larry B. Wallnau (Ed.). (2011). *Essentials of Statistics for the Behavioural Science*: Wadsworth: Belmont, CA94002 3098 USA.
- 9. Fullan, Michael, & Watson, Nancy. (2000). School-based management: Reconceptualizing to improve learning outcomes. *School effectiveness and school improvement*, 11(4), 453-473.
- 10. Hallinger, Philip. (1999). Can leadership enhance school effectivenessEducational management: Redefining theory, policy and practice (pp. 178-190).
- 11. Hallinger, Philip, & Heck, Ronald H. (1998). Exploring the Principal's Contribution to School Effectiveness: 1980-1995. *School effectiveness and school improvement*, 9(2), 157-191.

- 12. Heppner, P. P., & Heppner, M. J. (2004). Writing and publishing your thesis, dissertation, and research: A guide for students in the helping professions. Thomson/Brooks/Cole.
- 13. Leithwood, K., C. Day, P. Sammons, A. Harris, and D. Hopkins. (2006). *Seven strong claims about successful school leadership.*, London: Department for Education and Skills.
- 14. Leithwood, Kenneth, Seashore Louis, Karen, Anderson, Stephen, & Wahlstrom, Kyla. (2004). Review of research: How leadership influences student learning.
- 15. Les Bell, RayBolam & Leela Cubillo. (2003). A systematic review of the impact of school headteachers and principals on student outcomes. Centre for Educational Leadership and Management. The University Centre Barrack Road Northampton NN2 6AF: University of Leicester.
- 16. Marks, Helen M, & Printy, Susan M. (2003). Principal leadership and school performance: An integration of transformational and instructional leadership. *Educational administration quarterly*, 39(3), 370-397.
- 17. Moffitt, Jason R. (2007). What works: principal leadership behaviors that positively impact student achievement in elementary schools.
- 18. Senge, Peter. (2000). The Art and Practice of the Learning Organization: New York: Doubleday.
- 19. Watson, L. (2003). Selecting and developing heads of schools: 23 European perspectives. Sheffield, UK: European Forum on Educational Administration.
- 20. Wildy, Helen, & Louden, William. (2000). School restructuring and the dilemmas of principals' work. Educational Management Administration & Leadership, 28(2), 173-184.
- 21. Witziers, Bob, Bosker, Roel J, & Krüger, Meta L. (2003). Educational leadership and student achievement: The elusive search for an association. *Educational administration quarterly*, 39(3), 398-425.